Remarks

35 U.S.C. §101 rejections

In the papers mailed on September 30, 2010 claims 125 through 150 are "rejected" under 35 USC §101 for allegedly: representing non statutory subject matter, not having a specific utility, being overly broad and for failing the machine or transformation test. The Assignee traverses the claim rejections in a number of ways.

- 1. First, by noting that the evidence required to support the prima facie case that would sustain the claim rejections has not been provided. For example, MPEP 2164.07 states "the examiner has the initial burden of challenging an asserted utility. Only after the examiner has provided evidence showing that one of ordinary skill in the art would reasonably doubt the asserted utility does the burden shift to the applicant to provide rebuttal evidence sufficient to convince one of ordinary skill in the art of the invention's asserted utility. In re Brana, 51 F.3d 1560, 1566, 34 USPQ2d 1436, 1441 (Fed. Cir. 1995) (citing In re Bundy, 642 F.2d 430, 433, 209 USPQ 48, 51 (CCPA 1981)). Given the complete absence of evidence to support these assertions, the Assignee submits that the person authoring the papers has failed to establish the required prima facie cause that the rejected claims lack utility. It is also well established that "an applicant's assertion of utility creates a presumption of utility that will generally be sufficient to satisfy the utility requirement of 35 U.S.C. 101. See, e.g., In re Jolles, 628 F.2d 1322, 206 USPQ 885 (CCPA 1980); In re Irons, 340 F.2d 974, 144 USPQ 351 (CCPA 1965); In re Langer, 503 F.2d 1380, 183 USPQ 288 (CCPA 1974); In re Sichert, 566 F.2d 1154, 1159, 196 USPQ 209, 212-13 (CCPA 1977)". While the claimed invention clearly meets the machine or transformation test it is worth noting that said test is not the definitive test for statutory subject matter (see Bilski v. Kappos (08-964), Supreme Court)
- 2. Second, by noting that there is no statutory basis for the claim rejections as the claim rejections were authored by an individual and an organization with an apparently well documented lack of average or ordinary skill in the relevant arts and understanding of the law. It is well established that patent examination needs to be completed "in light of the specification as it would be interpreted by one of ordinary skill in the art." (In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364, 70 USPQ2d 1827 Fed. Cir. 2004, underline added). The comments regarding the lack of transformation, absence of the need for a computer and overly broad claims add to the existing body of clear and

- convincing evidence that the author and organization appear to lack the level of skill in the art required to complete a patent examination.
- 3. Third, by noting that the claim rejections fail under both standards of the APA and are therefore moot. The Assignee also notes that the rejections under 35 U.S.C. § 101 are contrary to the recently issued guidance from the Acting Associate Commissioner for Patent Examination Policy as the claims are all directed to providing concrete results for a real world entity and they all pass the machine or transformation test.
- 4. Fourth, by noting that the author failed to take note of the fact that in Gottschalk v. Benson, 409 U.S. 63 (1972), the Supreme Court stated that: "Transformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines." 409 U.S., at 70.

Furthermore, claim amendments have obviated these claim rejections.

35 U.S.C. §103 rejections

In the papers mailed on September 30, 2010 claims 125 through 150 are "rejected" under 35 U.S.C. §103(a) as being obvious given U.S. Patent 5,812,988 (hereinafter, Sandretto) in view of U.S. Patent 5,361,201 (hereinafter Jost) and U.S. Patent 4,414,629 (hereinafter, Waite). The Assignee traverses the rejections for obviousness in a number of ways.

- 1. First, by noting that the claim rejections are not in compliance with the Administrative Procedures Act and are therefore moot.
- 2. Second, by noting that there is no statutory basis for the claim rejections. The claim rejections are non-statutory because there is no statutory basis for giving any consideration to an obviousness rejection authored by individuals or an organization with a level of skill in the art that is not average or better. It is well established that a review for compliance with 35 U.S.C. 103 conditions for patentability requires a determination as to whether or not the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. The selection of references used to support the obviousness rejections adds to the apparently clear and convincing evidence that the author of said papers and the organization appear to lack the level of skill in the art required to complete a patent examination (see Appendix).
- 3. Third, by noting that the papers mailed September 30, 2010 have failed to establish a prima facie case of obviousness. In particular, the papers mailed September 30, 2010 fail to establish a prima facie case of obviousness for claims 125 150 by: citing

combinations of documents that teach away from the claimed invention, citing a combination of documents that fails to teach one or more limitation for every claim, failing to explain the combination as required by KSR v Teleflex, teaching a combination that requires a change in principle of operation of the disclosed inventions and teaching a combination that would destroy the ability of one or more of the inventions to function. MPEP 2143.03 provides that: to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art (In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

Furthermore, claim amendments have obviated these claim rejections.

35 U.S.C. § 112 First Paragraph Rejections

In the papers mailed September 30, 2010 claims 125 through 150 are rejected under 35 U.S.C. §112 first paragraph as lacking a written description that would enable those of average skill in the art to make and use the claimed invention. Specifically, the author of said papers has made an unsupported statement that the specification requires subjective judgments and lack a clear set of steps that allegedly would make it difficult to implement the invention. The Assignee traverses the §112 first paragraph rejection of claims 125 through 150 in several ways.

- 1. First, by noting that the assertions regarding the alleged lack of written description are not in compliance with the both standards of the Administrative Procedures Act and are therefore moot.
- 2. Second, by noting that there is no statutory basis for the claim rejections. The claim rejections are non-statutory because there is no statutory basis for giving any consideration to a written description rejection authored by individuals and/or an organization with a level of skill in the art that is not average or better. The obviousness rejections add to the apparently clear and convincing evidence that the author of said papers and organization appear to lack the level of skill in the art required to complete a patent examination.
- 3. Third, by noting that the papers mailed September 30, 2010 have failed to establish a prima facie case that the specification does not meet the requirements of §112 first paragraph. In particular, the author of said papers has failed to establish a prima facie case that the specification does not meet the requirements of §112 first paragraph. MPEP 2163 states that: "A description as filed is presumed to be adequate, unless or

until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., In re Marzocchi, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. Wertheim, 541 F.2d at 263, 191 USPQ at 97. In rejecting a claim, the examiner must set forth express findings of fact regarding the above analysis which support the lack of written description conclusion. The author of the papers mailed September 30, 2010 also failed to note that "there is no requirement that the words in the claim must match those used in the specification disclosure" and that the use of words in a claim that do not match those used in the specification does not comprise the incorporation of new matter (see In re Robert Skvorecz, CAFC 2008-1221).

Furthermore, claim amendments have obviated these claim rejections.

35 U.S.C. § 112 Second Paragraph Rejections

In the papers mailed September 30, 2010 claims 125 through 150 are rejected under 35 U.S.C. §112 second paragraph. The Assignee traverses the §112 second paragraph rejection of claims 125 through 150 in several ways.

- First, by noting that the assertions regarding the alleged lack of written description are
 not in compliance with the both standards of the Administrative Procedures Act and are
 therefore moot.
- 2. Second, by noting that there is no statutory basis for the claim rejections. The claim rejections are non-statutory because there is no statutory basis for giving any consideration to a written description rejection authored by individuals and/or an organization with an apparent level of skill in the art that is not average or better.
- 3. Third, by noting that the papers mailed September 30, 2010 have failed to establish a prima facie case that the specification does not meet the requirements of §112 second paragraph. In particular, the Assignee notes that the arguments presented by the author of said papers fail to establish the prima facie case required to sustain a §112 second

paragraph rejection. MPEP 2173.02 states that: definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent. See, e.g., Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). See also In re Larsen, No. 01-1092 (Fed. Cir. May 9, 2001). In the case of claims 125 150 the author of said papers has failed to establish the prima facie case that the specification does not meet the requirements of §112 second paragraph in at least four ways for every rejected claim. The four ways are:
- 1. by failing to interpret the claims in light of the specification,
- 2. by failing to provide any evidence that someone of average skill in the relevant arts would have difficulty interpreting the claims,
- 3. by failing to establish that the limitation(s) in the claims fail to describe the invention and/or
- 4. by failing to consider the claim as a whole.

These failures may be due to the fact that those authoring the papers mailed September 30, 2010 do not appear to understand any of the <u>scientific and/or</u> engineering principles applicable to the pertinent art.

Furthermore, claim amendments have obviated these claim rejections.

Statement under 37 CFR 1.111

37 CFR 1.111 requires that the basis for amendments to the claims be pointed out after consideration of the references cited or the objections made. The Assignee notes that this requirement is not relevant to the instant application because, as detailed above, there are no

references or objections to avoid. Having said that, the Assignee notes that amendments to the

independent claims obviate the rejections under 101 and 103 as none of the cited references

transform data into a predictive model and because the transformation makes it even more clear

that the claimed invention passes the machine or transformation test. The amendments to the

claims obviate the 112 first and second paragraph rejections by correcting informalities. As the

author of the papers mailed September 30, 2010 has provided additional evidence of novelty,

limitations have been removed from some claims in an attempt to make them broader.

Reservation of rights

The Assignee hereby explicitly reserves the right to present the previously modified and/or

canceled claims for re-examination in their original format. The cancellation or modification of

pending claims to put the instant application in a final form for allowance and issue is not to be

construed as a surrender of subject matters covered by the original claims before their

cancellation or modification.

Conclusion

The pending claims are of a form and scope for allowance. Prompt notification thereof is

requested.

Respectfully submitted,

Asset Trust, Inc.

/B.J. Bennett/

B.J. Bennett, President

Date: January 10, 2011

Serial No. 10/743,417

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APPENDIX

| Jost | Sandretto | Waite | 10/743,417 |
|---|--|--|---|
| Teachings: models developed from a plurality of properties with known values in an area can be used to: 1) estimate values for new properties in the same area, and 2) identify property characteristics that affect said estimated values | Teachings: 1) the value of each item within a plurality of items are independent of one another, and 2) the aggregate value of a plurality of independent items with known historical cash flows can be back-fit to a known value by iterating the discount rate for each item | Teachings: 1) an inductive process can be used to structure a field of data about a plurality of known objects so that the field of data can be used to support one or more predictions about new objects in the field (i.e. a new battery), and 2) distribution tables that summarize data regarding a sequence of related actions or events taken from many examples can be analyzed to determine cause and effect relationships (i.e. battery failure) | Teachings: 1) a plurality of data about a single object or substance can be transformed into a predictive model, and 2) induction algorithms can be used to identify variables causal to changes in a predictive model output |
| Step 1 – select training data regarding properties with known values | Step 1 – estimate item cash flows using any method | Step 1 – select a finite field of data | Step 1 – prepare data for processing |
| Step 2 – train neural network models using training data | Step 2 – generate an initial estimate of a discount rate using inflation data and a regression model based on CAPM | Step 2 – describe and code selected parameters | Step 2 – select a data variable to be modeled (i.e. revenue) and data that will be used for model input |
| Step 3 – store neural network models | Step 3 – iterate discount rate estimates for each item until total matches known portfolio value | Step 3 – make data packages of selected characteristics | Step 3 –train a plurality of predictive models |
| Step 4 – train error models using training data and neural network models | | Step 4 – select data packages and search optically | Step 4 – select an initial set of data from the trained predictive models |
| Step 5 – store error models | | Step 5 – order selected packages into a set | Step 5 – select a subset of the initial variables as the second data set |

| | | Step 6 – use the |
|---|--|--|
| Step 6 – obtain new property data and area data | Step 6 – analyze set of packages to determine information content | step 6 – use the second data set as an input to a plurality of predictive models |
| Step 7 – apply stored neural network models to the property data and error data | Step 7a – if information content is high, then analyze data using conventional means Step 7b – if information content is low, then modify selected parameters using methods that may include crypto-analytic techniques to create additional data and recode | Step 7 – select the model with the lowest error from step 6 as the final model |
| Step 8 – apply the error models to the property data and error data | Step 8 – make data packages of selected characteristics | |
| Step 9 – output results including reason codes indicating relative contribution of different property characteristics to property value | Step 9 – select data packages and search optically | |
| | Step 10 – order selected packages into a set | |
| | Step 11 – analyze data to determine information content | |
| | Step 12a – if information content is high, then analyze data using conventional means Step 12b – if information content is low, then repeat steps 7b through 11 until | |
| | information content is high | |

Summary of major points from an analysis of the Jost and Waite documents:

- 1. Waite teaches away from the claimed invention by teaching that information from a plurality of known objects is required to develop an initial data package for a new object (i.e. a new battery). The instant application (and all the other patent applications owned by the Assignee) do not teach a reliance on data packages and teach the identification of data sets from the data for a single, new object (i.e. an organization). It is unlikely that anyone of average skill in the relevant arts would cite a reference that teaches the development of a data package requires an analysis of a plurality of known objects in an obviousness rejection for an invention that teaches the development a data set from the data for a single object;
- 2. Jost teaches away from the claimed invention by teaching that information from a plurality of known objects is required to develop a predictive model for a new, unknown object (i.e. a new property). The instant application (and all the other patent applications owned by the Assignee) teach the development of predictive models from the data for a single, new object (i.e. an organization). It is unlikely that anyone of average skill in the relevant arts would cite a reference that teaches the development of a predictive model requires an analysis of a plurality of known objects in an obviousness rejection for an invention that teaches the development predictive models from data for a single object;
- 3. Sandretto also teaches away from the claimed invention by teaching a method that relies on known values to develop models;
- 4. Waite teaches away from the claimed invention by teaching that developing an initial data package for a new, unknown object (i.e. a new battery) can be completed only by examining data about a plurality of known objects. The instant application (and all of the other patent applications owned by the Assignee) do not teach a reliance on data packages and teach the use of a plurality of predictive models to identify an initial data set from the data for a single, new object (i.e. an organization). It is unlikely that anyone of average skill in the relevant arts would cite a reference that teaches the development of an initial data package requires an examination of data regarding a plurality of known objects in an obviousness rejection for an invention that teaches the development of an initial data set for a single object using a plurality of models;
- 5. Jost teaches away from the claimed invention by teaching reliance on a single type of predictive model to develop a predictive model for a new, unknown object (i.e. a new property). The instant application (and all the other patent applications owned by the Assignee) teach the use of a plurality of different types of predictive models in the development of predictive models from the data for a single, new object (i.e. an

- organization). It is unlikely that anyone of average skill in the relevant arts would cite a reference that teaches the development of a predictive model using a single type of predictive model in an obviousness rejection for an invention that teaches the use of a plurality of different types of predictive models;
- 6. Jost teaches away from the claimed invention by teaching the requirement for two models, an error model and a predictive model, for analyzing new, unknown object (i.e. a new property). The instant application (and all the other patent applications owned by the Assignee) teach the use of a single model developed from the data for a single, new object (i.e. an organization). It is unlikely that anyone of average skill in the relevant arts would cite a reference that teaches the requirement for two models in an obviousness rejection for an invention that teaches the use of a single model;
- 7. Waite teaches away from method of the claimed invention by teaching that the initial data package needs to be examined to determine its information content before an additional stage of processing can be completed. This teaches away from the method of the instant application (and all applications owned by the Assignee) that does not teach a reliance on data packages and does not require an analysis of information content at any point in their novel processing. It is unlikely that anyone of average skill in the relevant arts would cite a reference that teaches the need for evaluating the information content of a data package before it can be processed in an obviousness rejection for an invention that does not utilize this type of analysis at any step;
- 8. Waite teaches away from the instant application (and all applications owned by the Assignee) by teaching that the processing completed with the initial data package depends on the information content of the initial data package. The instant application does not teach a reliance on data packages, does not examine the information content of any data and does not vary any subsequent stages of processing on the basis of an information content analysis. It is unlikely that anyone of average skill in the relevant arts would cite a reference that teaches that the information content of a data package determines the type of processing that will be completed using said data package in an obviousness rejection for an invention that does not use this type of analysis in determining any of the steps in processing;
- 9. Waite teaches a meaning for "induction" that teaches away from the well known meaning of the word implicit in some of the dependent claims of the instant application (and all other applications owned by the Assignee). It is unlikely that anyone of average skill in

- the relevant arts would confuse the meaning of "induction" taught by Waite with the well known meaning of the word implicit in the instant application;
- 10. Waite's teaching regarding the identification of causal actions in a sequence of actions or events is discussed below in more detail. Summarizing, it is clear that Waite's focus on identifying in a sequence of related actions taken from many examples, just what specific action precedes another since this could have bearing on some cause and effect relationship (C18, L63 C19, L6) has no relevance to the claimed invention that is not concerned with the analysis of a sequences of actions or events. It is unlikely that anyone of average skill in the relevant arts would suggest that the analysis of action sequences using frequency diagrams taught explicitly by Waite was relevant to the instant application (or any other application owned by the Assignee);
- 11. Waite teaches away from the claimed method for causal analysis by teaching that it can be completed without a search for missing variables which is incorporated in some of the dependent claims,
- 12. Waite teaches away from the claimed method for causal analysis by teaching reliance on the analysis of frequency distribution tables taken from many examples in place of the claimed reliance on summaries created by induction algorithms, and
- 13. Sandretto teaches back-fitting by iterating the value of one input variable in a plurality of pre-determined risk return models for a plurality of independent items. This also teaches away from the teachings of the instant application that does not iterate any input variable values while transforming data into predictive models in place of selecting from a plurality of pre-defined risk return models. It is unlikely that anyone of average skill in the relevant arts would suggest that Sandretto was relevant to the instant application.

In short, the cited references fail to teach or suggest the subject matter as a whole by teaching away from the claimed methods and they appear to add to the evidence that the author of the instant set of papers does not appear to have a level of skill in the relevant arts that is average or better.

A review of the table and discussion above also shows that the cited references also fail to teach or suggest a single step of the claimed invention.

Analysis of Waite's identification of causal actions

As shown below, Waite discusses the identification of cause and effect fourteen times. A review of the fourteen discussions shows that this portion of the Waite disclosure is relevant only to the extent that it provides additional evidence of novelty, non-obviousness and newness of the claimed invention.

- 1. (C2, L52 C3, L6) Much of the philosophy of the present invention and broadly some of the approaches are derived from cryptanalytic techniques. The cryptanalyst has been largely confined to problem solving, such as code breaking. However, his approach to problem solving has never been applied before to prediction work. Neither has his approach been so formalized as to create data packages in the objective sense of selection of a relatively large number of characteristics, parameters or factors to be considered and coding all data packages to show the presence of each of the parameters or factors. Many of the techniques of the cryptanalyst can be used, but the present invention is not confined to these but may use statistical or other known data handling techniques in the course of the process. It is the use of the invention directly for problem solving, particularly for prediction, which is completely surprising and unexpected. The ability of the process to make deductions that were impossible to make in the past constitutes a major advance in the art. Furthermore, the reversibility of the process (that is, its ability to deduce cause from effect or effect from cause, and its ability to proceed in small iterative processes and subprocesses whose direction is completely flexible) constitutes a completely new approach to problem solving in a scientific, systematic manner. Statement of capability.
- 2. (C5, L3 L30) Transposition techniques, as opposed substitution techniques, change the relative positions of data with respect to dimensions being mapped such as time, space and other desired referenced measurements. The importance of transposition as far as data is concerned, is that data itself, no matter how you pick it up has a position relative to some frame of measurement. Such a position significant approach is almost never used in a statistical approach, and by the present invention I have determined that such an approach reveals important and sometimes critical structure in the data. The statistician tends to use position only where he can use it as a transform. Another thing that a statistician can never do is the so-called "trace back" list. An empiricist must keep a log of what he undertakes with its associated data retraceable back to the original data for each step in his 'discovery' procedure. For example, it is impossible to take the mean or the standard deviation in statistics and go back to the original data from the constructs as they are used in practice. As statisticians get further and further down the tree in their analysis, it becomes more and more difficult for the statisticians to trace back to the original data causing these results. And in the end they become obliged to reach conclusions drawn from only a portion of the original data. To summarize, an empiricist uses substitution and transposition rather than transformation, and scaling. Such methods are basic to the present invention. — Statement of limitation of statistics.
- 3. (C16, L56 66) As discussed above, no means for unravelling the structure of large masses of information for the purpose of establishing cause and effect relationships has been available. Statistical treatment, such as, discriminant analysis, linear regression or analysis of variance, do not provide adequate description of the data structure since internal relationship of the information is neglected. An approach has been needed which provides a formalized system of procedure or method which reveal both the content and distribution of all relevant information. Statement of limitation of statistics.

- 4. (C16, L67 C17, L10) To handle modern day problems dealing with tens of thousands of variables, complex interacting environments and large, incomplete, unorganized and imprecise data test-sets, a need for new methodology or system of methods for treatment of the data is essential. The present invention relates to such a system of novel methods which has been successfully tried experimentally on many applications in industry and science. The purpose of this invention is to make possible identification of dominating and persistant features, aspects and associations in the data test-sets which serve as a basis to determine cause and effect relationships and which can be confirmed by statistical methods. Statement of intent.
- 5. (C17, L39 42) Empiricism derives causal relationships from the bottom up. But when modern problems prove not to be functional, as often is so, it is easy in using formal statistics to confuse effects with causes. General method and limitation of statistics.
- 6. (C18, L63 C19, L6) Another set of distribution tables are made from position identifiers. In some data files, action and/or reactions are listed over time. In these cases, it is of interest to know in a sequence of related actions taken from many examples, just what specific action precedes another since this could have bearing on some cause and effect relationship. Since such relationship need not be immediately following or contiguous, methods must be designed to search for this relationship. These positional distribution mappings also consider combinations, with Boolean conditions just as the measurement distributions do. Method summary.
- 7. 5. What cause and effect relationships have been identified? Method checklist.
- 8. 8. What order in positions are involved (i.e., cause and effect)? Method checklist.
- 9. (C20, L10 L36) The methods available in accordance with the present invention carry out many types of data reorganization in order to reveal inherent structures in the data files, and to eliminate irrelevant information. These methods include ordering, classifying, transposing, translating, transforming, combining, implementing to achieve symmetry and processing for input to the information measurement routines. They are selected partly by system schedule and partly as a result of feedback information from the information measurement routines, and application of other methods results. This feedback capability makes the method selection for processing the data dynamic and data-dependent. The overall procedure and many of the steps and subroutines are original and have not been found anywhere in the literature. They have been designed from needs set down in operational missions, and have resulted in detecting cause and effect relationships which were not known or suspected. The basic steps of the method are shown in FIG. 2. The numbers indicating the order in which the steps are performed is shown in the upper right hand corner of each block. The schedule is changed or stopped, however, by certain results from the information measurement routines. Examples of these basis methods are detailed below. Statement of past results.
- 10. (C25, L4 34) This method is subpart of the whole process for determining information structure. An example of how works is found in the simple, trivial example of the counters described above, but it applies to the procedures to determine the sequence patterns of the amino acids in biological cells which can only be handled by a computer runs. It is needed because there exists no mathematical way, in statistics, in other mathematics, nor, any method using pure cryptanalysis to handle the problem of prior associations of order that are not nearest neighbors. By "nearest neighbors" is meant an occasional technique whereby two elements which are being investigated occur directly contiguous to one another. In this instance, we are concerned with a situation where the sequence of occurrences is important but the position need not be restricted to the contiguous. The method of the invention applied in this area identifies those relationships that always follow other specific relationships, which is a requirement of cause and effect determination. Method summary.

- 11. (C25, L45 50) The problem of identifying cause and effect relationships is dependent upon determining the percentage of times any event or coded event occurs in a sequence of events which represent some historical record. The method for determining this percentage is shown in Section XX entitled "Simple Examples of Antecedents Consequence". More detailed method summary differs from prior statement which says relationships always follow others.
- 12. (C26, L13 24) The percentage table is then analyzed to determine where the high (or sometimes low) percentages are. These situations represent the candidates for cause and effect determination later. It is the high percentage effects which one is concerned with. Those seeking information for prediction purposes are interested in the very high or the very low percentages in the table. Cut off may be somewhat arbitrarily chosen where the antecedents consequence table has no values higher than 80% Then, go to conditional methods and preferably conditional associational methods to find something alone that has to be added before reprocessing data. More detailed method summary.
- 13. (C27, L36 42) By selection of the highest or lowest percentages from Table VIII, cause and effect can be determined. For example, the use of the above procedure in determining the cause of spacecraft battery failure was explained in Section IX above. More detailed method summary.
- 14. (C34, L26 45) The method for establishing the cause and effect relationship is to obtain distributional tables in a generalized procedure for examining all of the ordering sequence possibilities. For example: Process A may be immediately followed by Process B, or it may be followed with some other process C (not relevant) and then Process B. This is represented by A.B, A. . B, A. . . B etc. At present there is no formalization system to accomplish list distributional search for internal data structure. In the example given in Table X above, the amino-acids are all run on the A 'n-dot' B distributional arrays to identify the critical positional factors. The clearest example is shown in language structure analysis, where i.g. or t. . n as terminal letter sequences for English words will turn up to mean '-ing' and 'tion' much more frequently than random expection. In scientific and industrial applications these distributions indicate a candidate phenomena for additional cause and effect analysis. More detailed method summary.

Summary – Waite teaches a method for identifying a causal action/event from a sequence of actions/events that were experienced by plurality of different objects by using frequency distribution tables. This teaching does not have any relevance to the instant application (or any other application in the Assignee's portfolio) as the instant application is not concerned with identifying an action or event from a sequence of actions or events and/or analyzing the known results for a plurality of different objects.